

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S3	5	zhang-zhiqiang.in.	USPAT	AND	OFF	2006/07/26 12:07
S4	0	("6783746").URPN.	USPAT	AND	OFF	2006/07/26 12:13
S5	93221	lubricant	USPAT	AND	OFF	2006/07/26 15:18
S6	2331	S5 and (thermal adj conductivity)	USPAT	AND	OFF	2006/07/26 15:19
S9	1353	S8 and (carbon or graphite)	USPAT	AND	OFF	2006/07/26 15:21
S8	2131	S5 and (thermal adj conductivity) @ad<"20020530"	USPAT	AND	OFF	2006/07/26 15:21
S13	3	S12 and (nanomaterial or nanotube or nanofiber)	USPAT	AND	OFF	2006/07/26 15:52
S12	680	S9 and dispers\$3	USPAT	AND	OFF	2006/07/26 15:53
S14	1521	(nanomaterial or nanotube or nanofiber)	USPAT	AND	OFF	2006/07/26 15:56
S17	217	S16 and dispers\$3	USPAT	AND	OFF	2006/07/26 15:57
S16	370	S14 and fluid	USPAT	AND	OFF	2006/07/26 15:57
S15	70	S5 and S14	USPAT	AND	OFF	2006/07/26 15:57
S18	119	S16 and dispers\$3 and @ad<"20020530"	USPAT	AND	OFF	2006/07/26 15:58
S11	40	S9 and "508".clas.	USPAT	AND	OFF	2006/07/26 15:58
S22	22	S19 and lubric\$8	US-PGPUB; USPAT	AND	OFF	2006/07/26 16:18
S24	8858	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1)	US-PGPUB; USPAT	AND	ON	2006/07/26 16:19
S23	1521	S14	US-PGPUB; USPAT	AND	ON	2006/07/26 16:19
S19	119	S16 and dispers\$3 and @ad<"20020530"	US-PGPUB; USPAT	AND	OFF	2006/07/26 16:19
S27	65	S26 and dispers\$3	US-PGPUB; USPAT	AND	ON	2006/07/26 16:20
S26	104	S5 and S24	US-PGPUB; USPAT	AND	ON	2006/07/26 16:20
S29	884	S24 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/26 16:22
S30	226	S29 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/26 16:23
S31	135	S30 and thermal	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/26 16:26

## EAST Search History

S32	122	S31 and (fluid or liquid or oil or grease)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/26 16:38
S34	5	("5641424"   "5863463"   "6043199"   "6059996"   "6103144").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/07/27 08:10
S36	6	S35 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/27 09:41
S38	8	252/7\$.ccls. AND (nanotube or nanofiber or nanomaterial) AND @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/27 09:44
S37	2	252/71.ccls. AND (nanotube or nanofiber or nanomaterial) AND @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/27 09:44
S43	122	S42 and (fluid or liquid or oil or grease)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 09:46
S42	135	S41 and thermal	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 09:46
S41	226	S40 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 09:46
S40	890	S39 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 09:46
S39	8908	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1)	US-PGPUB; USPAT	AND	ON	2006/07/27 09:46
S33	23	S32 and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 09:46
S44	13	S43 and "dispersing agent"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 09:47
S47	1353	S46 and (carbon or graphite)	USPAT	AND	OFF	2006/07/27 10:05
S46	2131	S45 and (thermal adj conductivity) @ad<"20020530"	USPAT	AND	OFF	2006/07/27 10:05
S45	93221	lubricant	USPAT	AND	OFF	2006/07/27 10:05
S48	40	S47 and "508".clas.	US-PGPUB; USPAT	AND	OFF	2006/07/27 10:08

## EAST Search History

S50	63	S48 or S49	US-PGPUB; USPAT; USOCR; EPO; JPO	AND	OFF	2006/07/27 10:09
S49	23	S43 and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:09
S52	63	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1 or nanoparticle\$1) and @ad<"20020530" and lubric\$8 and thermal and (fluid or liquid or oil or grease or medium) and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:11
S51	0	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1 or nanoparticle\$1) and @ad<"20020530" and lubric\$8 and thermal and (fluid or liquid or oil or grease or medium) and dispersant	EPO; JPO	AND	ON	2006/07/27 10:11
S53	15	("5853877").URPN.	USPAT	AND	OFF	2006/07/27 10:12
S54	12	S53 and @ad<"20020530"	USPAT	AND	OFF	2006/07/27 10:41
S56	1123	S55 and lubric\$8	USPAT	AND	OFF	2006/07/27 10:42
S55	1235	"pour point depressant" and @ad<"20020530"	USPAT	AND	OFF	2006/07/27 10:42
S57	508	S56 and thermal	USPAT	AND	OFF	2006/07/27 10:43
S58	1199	"pour point depressant" and @ad<"20020530" and lubric\$8 and thermal	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:44
S60	0	S59 and S39	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:47
S59	984	S58 and dispers\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:47
S62	3	S61 and 508/113.ccls.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:48
S61	678	S59 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 10:48
S63	4	("4735733").URPN.	USPAT	AND	OFF	2006/07/27 10:52
S64	2	withers.in. and triton	USPAT	AND	OFF	2006/07/27 11:02
S66	3	"1052307".pn.	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/27 11:20

## EAST Search History

S67	1	"10065671".pn.	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/27 11:22
S35	9	252/70.ccls. AND (nanotube or nanofiber or nanomaterial)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/27 11:23
S68	4	"949199".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/07/27 11:24
S69	69	traditional adj (dispersant or dispersing agent)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 16:22
S70	26	S69 and petroleum	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/27 16:23
S73	1447	S72 and dispers\$3	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:15
S72	7209	(heat adj transfer adj fluid) and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/28 08:15
S71	10587	(heat adj transfer adj fluid)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/28 08:15
S75	1447	S73 or S74	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:16
S74	47	S72 and ("dispersing agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:16
S76	31	S75 and (nanotube or nanomaterial or nanoparticle or nanofiber)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:23
S77	940	S75 and (carbon or graphite)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:24
S78	116	S75 and nano\$12	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:25

## EAST Search History

S81	137	S77 and ("thermal conductivity")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:26
S80	940	S77 and ("thermal conductivity" or "heat transfer")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:26
S79	1447	S75 and ("thermal conductivity" or "heat transfer")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:26
S82	29	S81 and lubric\$8	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:50
S83	11	S72 and polyolester	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 08:54
S85	109	succinimide and nanotube	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 09:23
S84	118	S72 and diester	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 09:23
S86	39	succinimide and nanotube and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 09:25
S87	3	succinimide and nanotube and dispersant and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:07
S89	45	(seal adj swelling adj agent)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:10
S88	0	(seal adj swelling adj agent) and S72	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:10
S90	30	(seal adj swelling adj agent) and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:31

## EAST Search History

S92	80	("functional fluid") and ("ashless dispersant") and thermal and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:33
S91	201	("functional fluid") and ("ashless dispersant") and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:33
S93	27	("functional fluid") and ("ashless dispersant") and ("heat transfer") and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/28 10:37
S94	1	("5652201").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/28 10:38
S95	2	("3272746").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/31 08:54
S97	1	("4234435").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/31 08:56
S96	2	("3821302").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/31 08:56
S98	1	"4632769".pn.	USPAT	AND	OFF	2006/07/31 09:19
S99	1	"4632769".pn.	USPAT	AND	OFF	2006/07/31 09:31
S100	22	"4519929"	USPAT	AND	OFF	2006/07/31 09:32
S101	1	("4160739").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/31 09:33
S103	94	pre-shear	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 10:51
S102	1	("4149984").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/31 10:51
S104	33	S103 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 10:52
S106	79	pre-shearing	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 10:53
S105	9	S104 and carbon	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 10:53

## EAST Search History

S10 7	49	pre-shearing and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 10:54
S10 9	0	(nanotube\$1 or nanofiber\$1 or nanomaterial\$1 or nanoparticle\$1) AND pre-shear\$3 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:02
S11 1	1095	(nanotube\$1 or nanofiber\$1 or nanomaterial\$1 or nanoparticle\$1) AND ultrasonic\$4 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:04
S11 0	4	(nanotube\$1 or nanofiber\$1 or nanomaterial\$1 or nanoparticle\$1) AND pre-shear\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:04
S11 5	419	S111 and shear\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:12
S11 4	0	S111 and preshear\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:12
S11 3	0	S111 and preshead\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:12
S11 2	220	(nanotube\$1 or nanofiber\$1 or nanomaterial\$1 or nanoparticle\$1) AND ultrasonic\$4 and @ad<"20020530" and milling	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:12
S11 7	309	S115 and viscosity	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:14
S11 6	215	S115 and dispers\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:14
S11 9	0	S117 and (stable adj viscosity)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:17
S11 8	140	S116 and S117	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:17
S12 1	384	(stable adj viscosity) and shear\$3 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:22
S12 0	268	S117 and stable	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:22
S12 2	19	S121 and nano\$10	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:26

## EAST Search History

S12 3	305	S121 and dispers\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 11:59
S12 4	221	pre-shear\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:02
S10 8	19	pre-shearing and @ad<"20020530" and carbon	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:02
S12 5	119	S124 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:03
S12 6	79	S125 and viscosity	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:07
S12 7	889	(stable adj viscosity) and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 12:09
S12 8	28	S127 and ultrasonic\$4	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 12:11
S12 9	5	S127 and (fuel adj injector)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 12:12
S13 2	554	S130 and S131	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:21
S13 0	206536	(gel or paste) and (dispersion or suspension) and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:21
S13 3	0	S132 and (functional adj fluid)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:22
S13 4	92	S132 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:25
S13 5	43	S134 and oil\$1	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:26
S13 8	323	nonylphenoxy(ethyleneoxy)ethanol and @ad<"20020530" and dispers\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:27
S13 7	570	nonylphenoxy(ethyleneoxy)ethanol and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:27



## EAST Search History

S13 6	700	nonylphenoxy(ethyleneoxy)ethanol	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 12:27
S13 9	72	S138 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 13:24
S14 1	9	S140 and ("508".clas. or "252".clas.)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:25
S14 3	1	S140 and @ad<"20020530" and S131	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:27
S14 2	132	S140 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:27
S14 4	159	nonylphenoxy(ethyleneoxy)ethanol and (dispersant or "dispersing agent" or "dispersal agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:28
S14 0	159	S136 and (dispersant or "dispersing agent" or "dispersal agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:28
S14 5	1	nonylphenoxy(ethyleneoxy)ethanol near (dispersant or "dispersing agent" or "dispersal agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:30
S14 7	230	antarox and (dispersant or "dispersing agent" or "dispersal agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:31
S14 6	11	nonylphenoxy(ethyleneoxy)ethanol with (dispersant or "dispersing agent" or "dispersal agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:31
S14 8	150	antarox and (dispersant or "dispersing agent" or "dispersal agent") and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:32
S15 0	0	S148 and S131	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:35

## EAST Search History

S14 9	35	S148 and lubric\$8	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:35
S15 1	6	S148 and (heat adj transfer)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:37
S15 3	123	S148 and carbon	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:38
S15 2	0	S148 and (functional adj fluid)	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:38
S15 6	4	S154 and S131	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:39
S15 4	240	(S144 or S148) and oil	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:39
S15 7	0	(S144 or S148) and refrigerant	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:43
S15 9	578	nonoxynol-9 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:49
S15 8	794	nonoxynol-9	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:49
S16 1	57	S159 and (dispersant or "dispersing agent")	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:51
S16 0	293	S159 and dispers\$3	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:51
S16 2	1957	igepal and fluid	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:56

## EAST Search History

S15 5	124	S154 and fluid	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:56
S16 4	1	igepal and S131 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 13:57
S16 6	170	S165 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:04
S16 5	292	"igepal co-880" or "igepal co-887"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:04
S16 3	17	igepal and S131	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:04
S16 9	1	S131 and S137	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:05
S16 8	0	S167 and S131	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:05
S16 7	118	S166 and dispers\$3	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:05
S17 0	1	S137 and nanoparticle	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:10
S17 2	25	S131 and "emulsifying agent" and surfactant and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:11
S17 1	2	S131 and "aqueous dispersant"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/07/31 14:11
S17 3	0	("6878361").URPN.	USPAT	AND	ON	2006/07/31 14:12

## EAST Search History

S17 4	20	("20020068170"   "20020081380"   "20020092613"   "20020102193"   "20020102194"   "20020113335"   "20020127171"   "20020159944"   "20020172767"   "20030004058"   "20030031620"   "20030133865"   "20030170167"   "5560898"   "5853877"   "5904852"   "6331262"   "6350488"   "6368569"   "6723299"). PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:13
S17 5	155	nikolaev.in.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:23
S17 7	8	("5641424"   "5863463"   "6043199"   "6059996"   "6103144").PN. OR ("6432320").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:42
S17 6	2	("6432320").PN. OR ("6695974"). URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:42
S18 2	23	S181 and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:44
S18 1	122	S180 and (fluid or liquid or oil or grease)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:44
S18 0	135	S179 and thermal	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:44
S17 9	226	S178 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:44
S17 8	890	S131 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 14:44
S18 3	481	moy.in.	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 15:41
S18 5	571	S184 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:00
S18 6	329	S185 and dispers\$3	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:01
S18 7	66	S186 and (heat adj transfer)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:02

## EAST Search History

S18 8	166	S186 and fluid	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:12
S18 9	124	S188 and conductivity	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:25
S19 1	104	("aspect ratio" or "length to diameter ratio") near S131	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:26
S19 0	273	S185 and (dispers\$3 or suspen\$4) and "500"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:26
S18 4	1939	("aspect ratio" or "length to diameter ratio") and S131	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:26
S19 2	32	S191 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:32
S19 3	1	S192 and (heat adj transfer)\	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:33
S19 4	1	S192 and (heat adj transfer)	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:35
S19 6	1650	ratio and S131 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:37
S19 5	14	nanofluids and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:37
S19 8	736	S197 and conductivity	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:38
S19 7	1115	S196 and thermal	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:38
S20 0	55	S198 and lubric\$8 and ("500" or "5000")	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:41
S19 9	83	S198 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2006/07/31 16:41
S20 1	1	("6419717").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/01 09:03

## EAST Search History

S20 4	1308	(gel or paste) and dispersion and S203	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:16
S20 3	8922	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1)	US-PGPUB; USPAT	AND	ON	2006/08/01 09:16
S20 2	13	ultrasonic and (preshear\$3 or pre-shear\$3) and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:16
S20 5	362	S204 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:17
S20 8	237	S207 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:18
S20 7	329	S206 and dispersion	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:18
S20 9	898	(gel or paste) and (heat adj transfer adj medium) and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:24
S20 6	1319	(gel or paste) and (heat adj transfer adj fluid) and @ad<"20050530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:24
S21 0	212	S209 and dispersion	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:25
S21 1	48	S209 and dispersion and lubric\$8	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:28
S21 5	60	S214 and dispersion	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:29
S21 4	95	paste and "functional fluid" and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:29

## EAST Search History

S21 3	210	S212 and dispersion	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:29
S21 2	478	(gel or paste) and "functional fluid" and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 09:29
S13 1	8908	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1)	US-PGPUB; USPAT	AND	ON	2006/08/01 13:36
S21 8	8922	(nanomaterial\$1 or nanotube\$1 or nanofiber\$1)	US-PGPUB; USPAT	AND	ON	2006/08/01 14:15
S21 7	13987	lubricant and shear and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 14:15
S22 1	354	(stable adj viscosity) and shear and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 14:20
S22 0	0	(stable adj viscosity) and shear and S218 and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 14:20
S22 2	199	(stable adj viscosity) and shear and dispersion and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 14:51
S22 3	44	(stable adj viscosity) and nozzle and dispersion and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 14:54
S22 4	3	(stable adj viscosity) and (turbulent adj flow) and dispersion and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 14:55
S22 7	49	lubricant and shear and S218 and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 15:01
S22 6	17	(stable adj viscosity) and ultrasonic\$4 and dispersion and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 15:01
S22 5	17	(stable adj viscosity) and ultrasonic\$4 and dispersion and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 15:01
S21 9	49	lubricant and shear and S218 and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 15:01
S22 9	2	(pre-shear\$3 or preshear\$3) and @ad<"20020530"	USOCR; EPO	AND	ON	2006/08/01 15:03
S22 8	173	(pre-shear\$3 or preshear\$3) and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 15:03
S23 3	112	shear and lubricant and dispersion and viscosity and injector and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 15:04

## EAST Search History

S23 2	4490	shear and lubricant and dispersion and viscosity @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 15:04
S23 1	0	shear and lubricant and dispersion and @ad<"20020530"	USOCR; EPO	AND	ON	2006/08/01 15:04
S23 0	5850	shear and lubricant and dispersion and @ad<"20020530"	US-PGPUB; USPAT; USOCR; EPO	AND	ON	2006/08/01 15:04
S21 6	171	(pre-shear\$3 or preshear\$3) and @ad<"20020530"	US-PGPUB; USPAT	AND	ON	2006/08/01 15:15
S23 4	71	S216 and stable	US-PGPUB; USPAT	AND	ON	2006/08/01 15:16
S23 6	1982	S235 and lubricant	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:23
S23 5	8788	shear and homogeneous and dispersion and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:23
S23 7	32	S236 and (functional adj fluid)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:26
S23 8	281	shear near uniform and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:27
S23 9	98	shear near uniform and dispersion and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:36
S24 0	1601	shear near viscosity and dispersion and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:37
S24 3	1127	dispersion and sonicated and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:41
S24 2	3749	dispersion and sonicated and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:41
S24 1	40	shear near viscosity and dispersion and injector and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:41
S24 4	24	dispersion and sonicated and viscosity and S218 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:53
S24 5	10	dispersion and ultrasonicated and viscosity and S218 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:56



## EAST Search History

S24 6	72	("nanotube suspension" or "nanotube dispersion") and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 15:57
S24 7	41	("nanotube suspension" or "nanotube dispersion") and @ad<"20020530" and \$sonicated	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:02
S25 0	839	shearing and @ad<"20020530" and "aspect ratio" and (dispersion or suspension)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:04
S24 9	1429	shearing and @ad<"20020530" and "aspect ratio"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:04
S24 8	35	("nanotube suspension" or "nanotube dispersion") and @ad<"20020530" and injected	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:04
S25 1	571	S250 and viscosity	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:05
S25 2	7	S251 and S218	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:10
S25 5	2	pre-shearing and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:11
S25 4	0	preshearing and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:11
S25 3	1385	shearing and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:11
S25 6	2	pre-shear and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:13
S25 7	6	preshear and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:14
S26 0	366	sheared and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:15
S25 9	0	pre-sheared and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:15
S25 8	1	presheared and agglomerates and viscosity and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/01 16:15

## EAST Search History

S26 1	1	"6695974".pn.	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/14 12:28
S26 2	1	"20040209782".pn.	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/16 18:35
S26 3	5	(styrene adj maleic adj anhydride) with hlb	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/16 18:42
S26 4	0	alkylsuccinimide with HLB	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/16 18:43
S26 7	364	(dispersant or (dispersing adj agent)) with HLB	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 11:03
S2	6	((("6169059") or ("5523006") or ("5560898") or ("5853877") or ("6099965") or ("5165909"))).PN.	USPAT; USOCR	OR	OFF	2007/05/17 11:03
S26 8	1	S266 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 11:04
S26 6	76	(dispersant or (dispersing adj agent)) near HLB	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 11:59
S27 1	278	S270 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:03
S27 0	15345	S269 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:03
S27 4	0	S270 and nanomaterial	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:04
S27 3	0	S271 and nanomaterial	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:04
S27 2	0	S271 and nanotube	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:04
S27 6	330	S270 and "252".clas. not S271	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:05
S27 5	8	S270 and nanotube	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:05

## EAST Search History

S27 7	25	(S271 or S276) and (heat adj transfer)	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:06
S26 9	27238	(sorbitan adj trioleate) or (sorbitan adj tristearate) or (polyoxyethylene adj sorbitol adj beeswax) or (polyoxyethylene adj sorbitol adj hexastearate) or (ethylene adj glycol adj fatty adj acid adj ester) or (propylene adj glycol adj fatty adj acid adj ester) or (propylene adj glycol adj monostearate) or (ethylene adj glycol adj monostearate) or (glycerol adj monostearate) or (sorbitan adh monooleate) or (propylene adj glycol adj monolaurate) or (sorbitan adj monopalmitate) or (polyoxyethylene adj dioleate) or (polyoxypropylene adj mannitol adj dioleate) or (diethylene adj glycol adj fatty adj acid adj ester)	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:30
S28 0	0	S279 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:31
S27 8	539	((sorbitan adj trioleate) or (sorbitan adj tristearate) or (polyoxyethylene adj sorbitol adj beeswax) or (polyoxyethylene adj sorbitol adj hexastearate) or (ethylene adj glycol adj fatty adj acid adj ester) or (propylene adj glycol adj fatty adj acid adj ester) or (propylene adj glycol adj monostearate) or (ethylene adj glycol adj monostearate) or (glycerol adj monostearate) or (sorbitan adh monooleate) or (propylene adj glycol adj monolaurate) or (sorbitan adj monopalmitate) or (polyoxyethylene adj dioleate) or (polyoxypropylene adj mannitol adj dioleate) or (diethylene adj glycol adj fatty adj acid adj ester)) with (dispersant or (dispersing adj agent))	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:31
S28 1	136	S279 and lubric\$8	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:32
S27 9	291	S278 and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:32
S26 5	2	succinimide with HLB	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:32

## EAST Search History

S28 2	4	mannich with HLB	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 12:48
S28 3	75	surfactant with HLB and "508".clas. and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 13:50
L1	41	508/113.ccls. and @ad<"20020530"	US-PGPUB; USPAT; USOCR	AND	ON	2007/05/17 18:18